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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,907	12/10/2003	Ryohei Okawahara	032404-077	6721

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EXAMINER	
WONG, ALLEN C	
ART UNIT	**PAPER NUMBER**
2621	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/730,907	OKAWAHARA ET AL.	
	Examiner	Art Unit	
	Allen Wong	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,6,7 and 10* is/are rejected.

7)☒ Claim(s) *3-5,8 and 9* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/10/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claims 1 and 10 are objected to because of the following informalities: the term "grater" should be changed to "greater". Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 2, 6, 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watabe (6,356,317) in view of Oku (5,907,372).

Regarding claims 1 and 10, Watabe discloses a video decoding and displaying method and apparatus comprising:

a managing unit that partitions a frame memory into a plurality of sectors, wherein the frame memory stores decoded video data of a frame not used as a predicted video, the decoded video data including a top-field data and a bottom-field data (fig.2 is the interior of element 11 of fig.1, wherein element 11 is partitioned into plural sectors for storing decoded video data, wherein elements 20-25 can be used to store top and bottom fields);

a write control unit that writes the top-field data and the bottom-field data of the decoded video data into separate free sectors of the frame memory (col.5, ln.21-29;

Watabe discloses the assignment of free sectors to store top-field and bottom-field data into the memory 11); and

a read control unit that, at the time of displaying decoded video data by reading it from the frame memory, releases, during a last display field period of a display video, the sector that stores the top-field data and the sector that stores the bottom-field data (fig.6 shows the interior of element 13 of fig.1 where there is a read unit 42, and a timing generation unit 41 where there are registers in element 43 that interacts with elements 41 and 42 for releasing the top field and bottom field data of the frame data from a plurality of frames).

Watabe does not specifically disclose a read control unit that, at the time of displaying decoded video data by reading it from the frame memory, simultaneously releases, during a last display field period of a display video, the sector that stores the top-field data and the sector that stores the bottom-field data when the sector capacity of the frame memory is equal to or greater than that required for one frame of video data to be displayed. However, Oku teaches the limited capacity of the sector capacity can cause the simultaneous release of video information by reading from memory (fig.3 and col.10, ln.10-31, the interlaced video data (ie. top and bottom fields) is read out for display in that the memory is larger than the picture size or frame size to be displayed). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Watabe and Oku, as a whole, for performing efficient decoding of image data without increasing the decoding speed while keeping costs at a minimal level (Oku col.30, ln.56-58).

Regarding claim 2, Watabe discloses wherein the read control unit determines a reading order of lines for reading decoded video data from the frame memory and displaying the data, based on a format suitable for an attribute of the displayed video, a picture size, and type of a display monitor (col.5, ln.40-52, fig.6, element 42 determines the read order of the lines).

Regarding claim 6, Watabe discloses wherein when the decoded video data includes video data that requires a conversion processing of a frame rate, the read control unit does not execute the release of sectors during each field period that is required for the display of one frame, and simultaneously releases a sector that stores top-field data and a sector that stores bottom-field data during a last display field period of the frame, in a reading and a displaying of the video data (fig.5, Watabe discloses the decoding of video data requiring the conversion of processing the frame rate via analysis of the header by analysis unit 31).

Regarding claim 7, Watabe discloses wherein the read control unit executes a field freezing when a display operation period during which a pause is input is a display operation period for releasing one of a sector that stores top-field data and a sector that stores bottom-field data, and executes a frame freezing when the display operation period is for simultaneously releasing both sectors (col.11, ln.45-54, note frame is delayed or froze).

Allowable Subject Matter

1. Claims 3-5, 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1 and 10 are rejected on the ground of nonstatutory double patenting over claim 1 of U. S. Patent No. 6,490,058 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: Claim 1 of the present invention discloses "...frame

memory comprising sectors..." and claim 1 of US Patent 6,490,058 discloses a "frame memory comprising banks...". Claim 1 of the present invention discloses "a frame memory interface for inputting said decoded data...", and claim 1 of US Patent 6,490,058 discloses "a write control unit that writes... decoded video data..." And claim 1 of the present invention discloses " a read control unit... releases...the sector...", and claim 1 of US Patent 6,490,058 discloses "a dynamic mapping mode... release said used sector when decoded image data are read." Both the present invention and claim 1 of US Patent 6,490,058 disclose alike, similar limitations.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (571) 272-7341. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm Flextime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Allen Wong
Primary Examiner
Art Unit 2621

AW
4/30/07